

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Cancelled)

Claim 2 (Currently Amended): The peptide according to Claim [[1]] 62, in which the amino acids [[J]] J², J⁴, J⁵, J⁶, J⁹, J¹⁰, J²³, J²⁴, J²⁸, J³⁰, J³⁵, J³⁹, J⁴¹, J⁴², J⁴³, J⁴⁶, J⁴⁷, J⁴⁸, J⁵³, J⁵⁴, J⁶⁷, J⁷⁰ and J⁷³ are selected, independently of one another, from the group consisting of Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr and Val, such that at least 50% of the amino acids J are polar residues selected from the group consisting of Arg, Asn, Asp, Gln, Glu, Gly, His, Lys, Pro, Ser and Thr.

Claim 3 (Cancelled):

Claim 4 (Previously Presented): A peptide consisting of a sequence selected from the sequences of SEQ ID No. 1 to SEQ ID No. 10.

Claim 5 (Previously Presented): A peptide consisting of the sequence of SEQ ID No. 1.

Claim 6 (Currently Amended): The peptide according to Claim [[1]] 62, wherein a tripeptide sequence is linked to the N-terminal end of the sequence (I), wherein said tripeptide sequence is selected from the group consisting of Gly-Ser-Cys-, Gly-Ser-Thr-, Gly-Ser-Pro-, Gly-Ser-Ser-, Gly-Ser-Gly-, and Gly-Ser-Gln-.

Claim 7 (Currently Amended): The peptide according to Claim [[1]] 62, wherein a tetrapeptide sequence is linked to the N-terminal end of the sequence (I), wherein said tetrapeptide sequence is selected from the group consisting of Gly-Ser-Gly-Cys- (SEQ ID NO: 17), Gly-Cys-Gly-Ser- (SEQ ID NO: 18), Gly-Ser-Gly-Ser- (SEQ ID NO: 19), and Gly-Cys-Gly-Cys- (SEQ ID NO: 20).

Claim 8 (Previously Presented): A peptide consisting of the sequence of SEQ ID No. 11 or SEQ ID No. 12.

Claim 9 (Previously Presented): A peptide consisting of the sequence of SEQ ID No. 13 or SEQ ID No. 14.

Claim 10 (Withdrawn/Currently Amended): A process for producing a peptide according to Claim [[1]] 62, said process comprising solid-phase chemical synthesis of said peptide.

Claim 11 (Withdrawn/Currently Amended): A process for producing a peptide according to Claim [[1]] 62, in culture, said process comprising:

- a) preparing a cDNA comprising a basic sequence encoding said peptide,
- b) inserting said cDNA into a suitable expression vector,
- c) transforming a suitable host cell with said vector into which the cDNA has been inserted, for replication of the plasmid,
- d) producing said peptide by translation of said cDNA in said host cell, and
- e) recovering the synthesized peptide.

Claim 12 (Withdrawn/Previously Presented): The process according to Claim 11, in which the vector is a plasmid.

Claim 13 (Withdrawn/Previously Presented): The process according to Claim 11, in which the vector is the vector pGEX-2T.

Claim 14 (Withdrawn/Previously Presented): The process according to Claim 11, in which the host cell is *E. coli*.

Claim 15 (Currently Amended): A chemical assembly with affinity for a phospholipid, comprising at least two peptides as defined in Claim [[1]] 62, which may be identical or different, said peptides being linked to one another.

Claim 16 (Previously Presented): The chemical assembly according to Claim 15, in which at least one of the peptides is a peptide consisting of a sequence selected from the sequences of SEQ ID No. 1 to SEQ ID No. 10.

Claim 17 (Withdrawn/Currently Amended): A method for covering a biomaterial comprising contacting said biomaterial with a peptide according to Claim [[1]] 62.

Claim 18 (Withdrawn/Currently Amended): A method for producing a filter for trapping activated circulating blood cells immobilizing a peptide according to Claim [[1]] 62 said filter.

Claim 19 (Currently Amended): A labeling compound comprising a peptide as defined in Claim [[1]] 62, coupled to a labeling molecule or to nanoparticles that are dense in electron microscopy.

Claim 20 (Previously Presented): A labeling compound comprising a chemical assembly as defined in Claim 15, coupled to a labeling molecule or to nanoparticles that are dense in electron microscopy, wherein the labeling molecule or the nanoparticles label the chemical assembly.

Claim 21 (Previously Presented): The labeling compound according to Claim 19, in which the labeling molecule is a fluorescent molecule.

Claim 22 (Previously Presented): The labeling compound according to Claim 19, in which the labeling molecule consists of one of the partners of the avidin-biotin system.

Claim 23 (Previously Presented): The labeling compound according to Claim 19, in which the labeling molecule is a radio element.

Claim 24 (Previously Presented): The labeling compound according to Claim 19, in which the labeling molecule is a contrast agent in magnetic resonance imaging.

Claim 25 (Previously Presented): The labeling compound according to Claim 19, in which the labeling molecule is technetium.

Claim 26 (Previously Presented): The labeling compound according to Claim 19, in which the nanoparticles that are dense in electron microscopy are gold nanoparticles.

Claim 27 (Previously Presented): A diagnostic kit comprising a compound according to Claim 19.

Claim 28 (Previously Presented): A diagnostic kit according to Claim 27, also comprising a suitable reagent for detecting said labeling molecule.

Claim 29 (Currently Amended): A kit for analysing analyzing and detecting negative charges at the surface of cells, comprising a peptide according to Claim [[1]] 62.

Claim 30 (Currently Amended): A kit for analysing analyzing and detecting negative charges at the surface of cells, comprising a chemical assembly according to Claim 15.

Claim 31 (Currently Amended): A kit for analyzing and detecting microvesicules in the blood, comprising a peptide according to Claim [[1]] 62.

Claim 32 (Previously Presented): A kit for analyzing and detecting microvesicules in the blood, comprising a chemical assembly according to Claim 15.

Claim 33 (Previously Presented): The kit according to Claim 29, in which the peptide is coupled to a label.

Claim 34 (Previously Presented): The kit according to Claim 30, in which the assembly is coupled to a label.

Claim 35 (Currently Amended): A filter for dialyzing activated circulating blood cells, said filter comprises [[a]] the peptide according to Claim [[1]] 62.

Claim 36 (Previously Presented): A peptide comprising the peptide according to Claim 4 and a tripeptide sequence which is linked to the N-terminal end of the peptide according to Claim 4, wherein said tripeptide sequence is selected from the group consisting of Gly-Ser-Cys-, Gly-Ser-Thr-, Gly-Ser-Pro-, Gly-Ser-Ser-, Gly-Ser-Gly-, and Gly-Ser-Gln-.

Claim 37 (Previously Presented): A peptide comprising the peptide according to Claim 4 and a tetrapeptide sequence which is linked to the N-terminal end of the peptide according to Claim 4, wherein said tetrapeptide sequence is selected from the group consisting of Gly-Ser-Gly-Cys-, Gly-Cys-Gly-Ser-, Gly-Ser-Gly-Ser-, Gly-Cys-Gly-Cys- or Gly-Cys-Gly-Ser-.

Claim 38 (Currently Amended): A peptide comprising the peptide according to Claim 5 and a tripeptide sequence which is linked to the N-terminal end of the ~~the~~ peptide according to Claim 5, wherein said tripeptide sequence is selected from the group consisting of Gly-Ser-Cys-, Gly-Ser-Thr-, Gly-Ser-Pro-, Gly-Ser-Ser-, Gly-Ser-Gly-, and Gly-Ser-Gln-.

Claim 39 (Currently Amended): A peptide comprising the peptide according to Claim 5 and a tetrapeptide sequence which is linked to the N-terminal end of the ~~the~~ peptide according to Claim 5, wherein said tetrapeptide sequence is selected from the group

consisting of Gly-Ser-Gly-Cys-, Gly-Cys-Gly-Ser-, Gly-Ser-Gly-Ser-, Gly-Cys-Gly-Cys- or Gly-Cys-Gly-Ser-.

Claim 40 (Previously Presented): A labeling compound comprising a chemical assembly as defined in Claim 16, coupled to a labeling molecule or to nanoparticles that are dense in electron microscopy, wherein the labeling molecule or the nanoparticles label the chemical assembly.

Claim 41 (Previously Presented): The labeling compound according to Claim 40, in which the labeling molecule is a fluorescent molecule.

Claim 42 (Previously Presented): The labeling compound according to Claim 40, in which the labeling molecule consists of one of the partners of the avidin-biotin system.

Claim 43 (Previously Presented): The labeling compound according to Claim 40, in which the labeling molecule is a radio element.

Claim 44 (Previously Presented): The labeling compound according to Claim 40, in which the labeling molecule is a contrast agent in magnetic resonance imaging.

Claim 45 (Previously Presented): The labeling compound according to Claim 40, in which the labeling molecule is technetium.

Claim 46 (Previously Presented): The labeling compound according to Claim 40, in which the nanoparticles that are dense in electron microscopy are gold nanoparticles.

Claim 47 (Currently Amended): A diagnostic kit comprising [[a]] the compound according to Claim 40.

Claim 48 (Previously Presented): The diagnostic kit according to Claim 47, also comprising a suitable reagent for detecting said labeling molecule.

Claim 49 (Currently Amended): A kit for analysing analyzing and detecting negative charges at the surface of cells, comprising a chemical assembly according to Claim 16.

Claim 50 (Currently Amended): A kit for analysing analyzing and detecting microvesicules in the blood, comprising a chemical assembly according to Claim 16.

Claim 51 (Previously Presented): The kit according to Claim 50, in which the chemical assembly is coupled to a label.

Claim 52 (Previously Presented): The labeling compound according to Claim 20, in which the labeling molecule is a fluorescent molecule.

Claim 53 (Previously Presented): The labeling compound according to Claim 20, in which the labeling molecule consists of one of the partners of the avidin-biotin system.

Claim 54 (Previously Presented): The labeling compound according to Claim 20, in which the labeling molecule is a radio element.

Claim 55 (Previously Presented): The labeling compound according to Claim 20, in which the labeling molecule is a contrast agent in magnetic resonance imaging.

Claim 56 (Previously Presented): The labeling compound according to Claim 20, in which the labeling molecule is technetium.

Claim 57 (Previously Presented): The labeling compound according to Claim 20, in which the nanoparticles that are dense in electron microscopy are gold nanoparticles.

Claim 58 (Currently Amended): A diagnostic kit comprising [[a]] the labeling compound according to Claim 20.

Claim 59 (Previously Presented): The diagnostic kit according to Claim 58, also comprising a suitable reagent for detecting said labeling molecule.

Claim 60 (Previously Presented): The kit according to Claim 31, in which the peptide is coupled to a label.

Claim 61 (Previously Presented): The kit according to Claim 32, in which the assembly is coupled to a label.

Claim 62 (New): A peptide consisting of the peptide sequence (I'): J¹-J²-J³-J⁴-J⁵-J⁶-Asp-U⁸-J⁹-J¹⁰-U¹¹-Arg-J¹³-J¹⁴-U¹⁵-Lys-Gly-X¹⁸-Gly-Thr-J²¹-Glu-J²³-J²⁴-U²⁵-J²⁶-J²⁷-J²⁸-U²⁹-J³⁰-J³¹-Arg-J³³-J³⁴-J³⁵-J³⁵-Arg-J³⁸-J³⁹-U⁴⁰-J⁴¹-J⁴²-J⁴³-U⁴⁴-J⁴⁵-J⁴⁶-J⁴⁷-J⁴⁸-J⁴⁹-Arg-J⁵¹-U⁵²-J⁵³-

J⁵⁴-Asp-U⁵⁶-Lys-Ser-Z⁵⁹-Leu-J⁶¹-J⁶²-J⁶³-J⁶⁴-Z⁶⁵-J⁶⁶-J⁶⁷-U⁶⁸-J⁶⁹-J⁷⁰-J⁷¹-U⁷²-J⁷³-J⁷⁴-J⁷⁵

(I'; SEQ ID NO:16)

in which J, Z, U and X represent the following amino acids:

- the amino acids J are selected independently of each other in such a manner that at least 50% of them are polar residues selected from the group consisting of Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Lys, Orn, Pro, Ser, Thr and Tyr;
- the amino acid J¹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Gly, Asp, Asn, Pro and His;
- the amino acid J² is selected independently of the other amino acids of the sequence (I') from the group consisting of Phe and Gly;
- the amino acid J³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Asp, Ser and Asn;
- the amino acid J⁴ is selected independently of the other amino acids of the sequence (I') from the group consisting of Glu, Ala, Pro and Val;
- the amino acid J⁵ is selected independently of the other amino acids of the sequence (I') from the group consisting of Arg, Glu, Ser, Met, Asn, Asp, Ile, and Leu;
- the amino acid J⁶ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ala, Arg, Val, Glu, Gln and Pro;
- the amino acid J⁹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Glu, Leu, Gln and Lys;
- the amino acid J¹⁰ is selected independently of the other amino acids of the sequence (I') from the group consisting of Thr, Asn, Ala, Ile, Val and Lys;
- the amino acid J¹³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Thr and Lys;
- the amino acid J¹⁴ is Ala;

- the amino acid J²¹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Asp and Asn;
- the amino acid J²³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Glu, Asp, Gln and Ala;
- the amino acid J²⁴ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ser, Thr, Met and Ala;
- the amino acid J²⁶ is selected independently of the other amino acids of the sequence (I') from the group consisting of Leu, Val and Ile;
- the amino acid J²⁷ is selected independently of the other amino acids of the sequence (I') from the group consisting of Thr, Asn, Ser, Asp and Glu;
- the amino acid J²⁸ is selected independently of the other amino acids of the sequence (I') from the group consisting of Leu, Val, Cys and Ile;
- the amino acid J³⁰ is selected independently of the other amino acids of the sequence (I') from the group consisting of Thr, Ala, Gly, Ser and Lys;
- the amino acid J³¹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ser, Asn, Glu, Tyr, His, Lys and Gly;
- the amino acid J³³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ser, Asn and Thr;
- the amino acid J³⁴ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ser, Asn and Thr;
- the amino acid J³⁵ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ala, Arg, Val, Asp, Thr and Lys;
- the amino acid J³⁶ is selected independently of the other amino acids of the sequence (I') from the group consisting of Gln and Glu;
- the amino acid J³⁸ is Gln;

- the amino acid J³⁹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Glu, Asp, Leu, Gln, Lys and Thr;
- the amino acid J⁴¹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ser, Ala, Val, Arg, Cys, Lys and Leu;
- the amino acid J⁴² is selected independently of the other amino acids of the sequence (I') from the group consisting of Ala, Phe, Lys, Thr, Gln and Leu;
- the amino acid J⁴³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ala, Glu, Ser, Thr and Lys;
- the amino acid J⁴⁵ is selected independently of the other amino acids of the sequence (I') from the group consisting of Lys and Gln;
- the amino acid J⁴⁶ is selected independently of the other amino acids of the sequence (I') from the group consisting of Thr, Ala, Arg, Ser and Glu;
- the amino acid .T⁴⁷ is selected independently of the other amino acids of the sequence (I') from the group consisting of Leu, Arg, Ala, Thr, His, Ser and Gln;
- the amino acid J⁴⁸ is selected independently of the other amino acids of the sequence (I') from the group consisting of Phe, Thr, Tyr and Ile;
- the amino acid J⁴⁹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Gly and Lys;
- the amino acid J⁵¹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Asp and Glu;
- the amino acid J⁵³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Leu, Ala, Lys, Ile, His, Thr and Glu;
- the amino acid J⁵⁴ is selected independently of the other amino acids of the sequence (I') from the group consisting of Asp, Ser, Ala, Thr, Lys and Glu;

- the amino acid J⁶¹ selected independently of the other amino acids of the sequence (I') from the group consisting of Ser and Thr;
- the amino acid J⁶² is Gly;
- the amino acid J⁶³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Lys, His, Asn and Asp;
- the amino acid J⁶⁴ is selected independently of the other amino acids of the sequence (I') from the group consisting of Phe, Leu and Met;
- the amino acid J⁶⁶ is selected independently of the other amino acids of the sequence (I') from the group consisting of Lys and Arg;
- the amino acid J⁶⁷ is selected independently of the other amino acids of the sequence (I') from the group consisting of Leu, Val, Thr and Glu;
- the amino acid J⁶⁹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Val and Leu;
- the amino acid J⁷⁰ is selected independently of the other amino acids of the sequence (I') from the group consisting of Ala and Gly;
- the amino acid J⁷¹ is selected independently of the other amino acids of the sequence (I') from the group consisting of Leu and Met;
- the amino acid J⁷³ is selected independently of the other amino acids of the sequence (I') from the group consisting of Lys, Thr, Arg, Met, Tyr and Asp;
- the amino acid J⁷⁴ is selected independently of the other amino acids of the sequence (I') from the group consisting of Pro, Thr and Arg;
- the amino acid J⁷⁵ is Ser;
- the amino acid X¹⁸ is chosen independently of the other amino acids of the sequence (I') from Ala, Asn, Cys, Gln, Gly, His, Ile, Leu, Met, Phe, Ser, Thr, Trp, Tyr and Val;

- the amino acids Z^{59} and Z^{65} are chosen independently from Glu, Asp, Lys and Arg;
- the amino acids U of the sequence (I') are chosen according to one of the combinations a) to l) presented in Table 1 below:

	U^8	U^{11}	U^{15}	U^{25}	U^{29}	B^{37}	U^{40}	U^{44}	U^{52}	U^{56}	U^{68}	U^{72}
a)	Val	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Val	Leu
b)	Ala	Ile	Ile	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Ile	Leu
c)	Ala	Ile	Ile	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Met	Val
d)	Ala	Leu	Met	Leu	Leu	Arg	Ile	Tyr	Leu	Leu	Ile	Met
e)	Ala	Leu	Met	Ile	Ile	Arg	Val	Tyr	Leu	Leu	Ile	Met
f)	Ala	Leu	Met	Ile	Ile	Arg	Ile	Phe	Leu	Leu	Ile	Met
g)	Ala	Leu	Met	Ile	Val	Arg	Ile	Phe	Leu	Leu	Ile	Phe
h)	Val	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Ile	Met
i)	Ala	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Ile	Met
j)	Ala	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Ala	Ala
k)	Val	Leu	Met	Ile	Leu	Arg	Ile	Tyr	Leu	Leu	Val	Leu
l)	Val	Leu	Met	Ile	Leu	Arg	Ile	Phe	Leu	Leu	Val	Leu

wherein the superscripts of J, Z, U and X represent the positions of these amino acids in said sequence (I').